

Work Plan for Year-End Holiday Plant Shutdown
ISTR System Construction, Operable Unit 3
Pohatcong Valley Groundwater Contamination Superfund Site

1. Introduction

On behalf of Pechiney Plastics Packaging, Inc. (PPPI), this Work Plan provides details of the scope of work, installation details, sequence and schedule for soil boring and monitoring points for the In-Situ Thermal Remediation System (ISTR) within the hygienically clean areas of the Main Production Area (MPA) of the building of the Albéa Americas facility in Washington, New Jersey. The work described herein is planned to be performed during the scheduled facility shutdown from December 22, 2019 to January 2, 2020 during the holiday break for Christmas and New Year's Day. This work includes the installation of at least two vertical soil borings with vertical profile sampling to refine the northern and southern extent of the soils to be thermally treated beneath the MPA, installation of one temperature monitoring point (T-14), and installation of two vapor monitoring points (VMP-4 and VMP-5). Figures with the locations of the planned borings and monitoring point installations are illustrated in Figure 1 (VMP-4 and VMP-5 construction details) and Figure C102 (all boring locations).

All work is planned to be performed within the western aisleway of the MPA that is accessible by the drill rig. All drilling work will be conducted within enclosures equipped with fans with filtered exhaust to allow adequate air changes and cooling and to minimize introduction of particulates into the MPA. Photos of drilling enclosures constructed to support the installation of supplemental soil borings inside the MPA and performed last year in December 2019 are provided in Attachment 1. The equipment planned for this work, a Boart Longyear Model LS250 sonic drill rig with shortened drill mast, will be equipped with a scrubber on the exhaust system. Similar to the work performed during the supplemental soil borings performed inside the MPA in December 2018, the drill rig will be exhausted outdoors through an exhaust pipe of sufficient diameter to prevent undue backpressure on the rig.

2. Scope of Work

A detailed scope for the planned work during the facility shutdown in the MPA is discussed below.

1.1. Soil Borings (SB-34 and SB-35)

At least two soil borings will be installed to further refine the extent of the soils to be thermally treated by the ISTR system, one at the north (SB-34) and one at the south (SB-35) limits of the currently defined soil treatment volume. Each soil boring will be installed vertically through overburden material/weathered bedrock with the sonic drill rig equipped with a 4-inch core barrel and 6-inch override casing. The locations of SB-34 and SB-35 are shown on Figure C102. When possible, the soil core barrel will be advanced without or with minimal use of drilling fluids to limit potential impact to soil sample collection. The override casing will also be advanced using a minimal amount of water to flush-out and clear the annular space between the 4- and 6-inch casing and to reduce friction. The geologic material encountered will be continuously sampled in 5-foot sections with soil samples collected for chemical analysis by the Ramboll Geologist or Engineer between the depths of 75 to approximately 120 feet bgs (two soil samples for lab analysis for every 5 vertical feet

of boring). Split samples will be provided to the USACE upon request. Similar to the field screening performed during the supplemental soil borings performed inside the MPA in December 2018, if supported by field observations and field screening data, PPPI may propose to terminate each boring above 120 feet if photoionization detector (PID) readings are sufficiently low. Information on each soil boring will be quickly conveyed to USEPA along with depths, PID reading and other visual or olfactory observations for concurrence to terminate the soil boring. Upon completion of drilling, the borings will be grouted to the surface and the surface concrete will be patched to match the existing floor including a surface finish with epoxy resin.

The samples selected for chemical analysis will be chosen based on the PID field screening readings and/or the presence of visual or olfactory indications of impact. Each soil sample will be collected in accordance with the soil sampling SOPs described in the QAPP including using a Terra Core sampler and preserved, labeled, placed in an ice-filled cooler, and delivered to Test America's Edison, New Jersey laboratory and for analysis of volatile organic compounds (VOCs), including trichloroethene (TCE), cis-1-2-dichloroethylene, trans-1-2-dichloroethylene, 1,1-dichloroethylene, and vinyl chloride using an expedited 24-hour turn-around-time.

1.2. Vapor Monitoring Points (VMP-4 and VMP-5) and Temperature Monitoring Point (T-14)

Two vapor monitoring points (VMP-4 and VMP-5) will be installed in the MPA at the locations shown on Figure C102. As illustrated in Figure 1, VMP-4 and VMP-5 will be installed to 25 feet bgs and completed at the surface with 12-inch flush-mount well vaults installed in a 14-inch minimum diameter cored hole. Each boring will be drilled with a sonic drill rig equipped with a 4-inch core barrel and 6-inch override casing and will be logged by the Ramboll Geologist or Engineer. No soil samples are proposed to be collected from these soil borings. The boring for VMP-4 will be drilled to a depth of approximately 25 feet bgs. The boring for VMP-5 will be drilled to an approximate depth of 114 feet bgs to allow for the installation of TMP-14 in the same boring.

1.3. Area Clean-Up

Upon completion of grouting, well construction, and surface completion the drill rig enclosures will be disassembled and the floors in the MPA impacted by work activities shall be swept and cleaned with a wet mop and power floor cleaner to the satisfaction of Albéa America's, the owner and operator of the facility.

2. Schedule of Activities

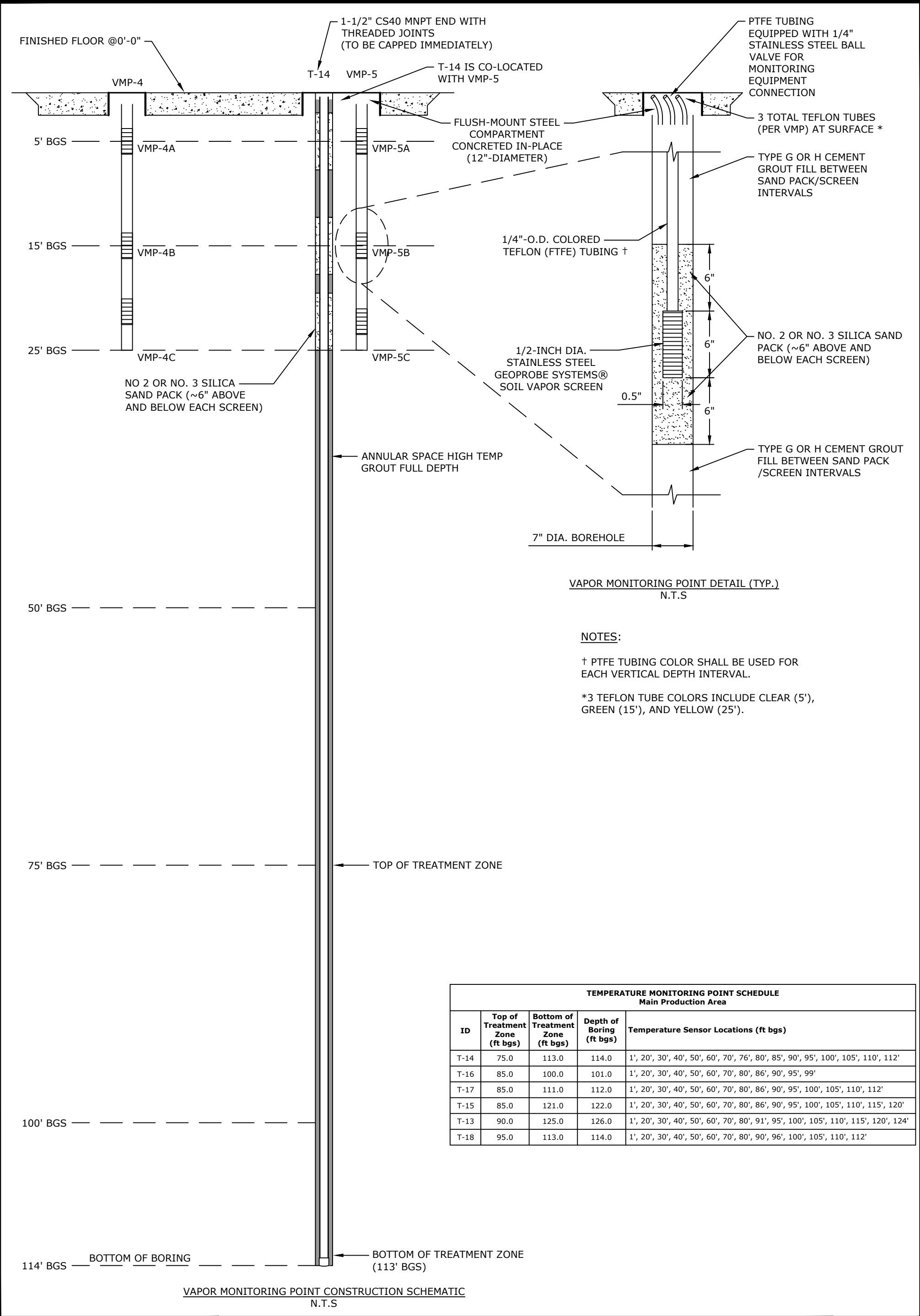
A shift schedule for the planned activities presented in this Work Plan, to be performed from the beginning of the facility shutdown on Saturday, December 21, 2019 at midnight until production operations are scheduled to resume on the morning of Thursday, January 2, 2020, is provided in Attachment 2. Prioritization of work will be to complete the planned boring activities in the area of the Group A Thermal Conductive Heater (TCH) wells, followed by the borings in the area of the Group B TCH wells. The extent of soils to be treated by each of the Group A and Group B TCH wells is depicted in Figure D-3. Accordingly, work will begin with the installation of soil boring at SB-34, then followed by the installation of VMP-4, both located within the area of the Group A TCH wells. Work will then proceed with the installation of soil boring SB-35 and lastly with the installation of T-14 and VMP-5 within the area of the Group B TCH wells. Depending on the results of PID screening or the soil

analytical results of obtained at either boring SB-34 or SB-35, additional step in or step-out soil borings may be proposed to be performed prior to moving on to monitoring point installation within Group A or Group B.

3. Reporting

The results of the soil boring and monitoring point installation activities along with field screening and analytical results will be summarized in a brief Technical Memorandum and submitted to the USEPA.

FIGURES



For Construction

1. SEE SHEET C101 FOR ADDITIONAL NOTES AND LEGEND.
2. EACH HEATER WILL HAVE A CO-LOCATED VAPOR EXTRACTION WELL.

 ISTR HEATERS ((VERTICAL) TOTAL OF 57)



ISTR HEATER FAN (ANGLED) WITH TRENCH
AND TOTAL OF 107 ANGLED HEATERS)

⑦ TEMPERATURE MONITORING POINTS (T)
(TOTAL OF 7)

TEMPERATURE MONITORING POINT
PREVIOUSLY INSTALLED (T) (TOTAL OF 11)

■■■■■■■■■■ THERMAL TREATMENT ZONE (TTZ)

■■■■■ THERMAL TREATMENT ZONE A (TTZ)

■■■■■ THERMAL TREATMENT ZONE B (TTZ)

— — — THERMAL TREATMENT ZONE C (TTZ)

OVERHEAD DUCT TO
BE REMOVED

GROUP B

AUX 100 CFM SVE
SYSTEM AREA

INTERIOR OVERHEAD
DUCTING (~12' OVERHEAD)

GROUP C

EXISTING AIR HANDLING UNIT

CONFIRMED THERMAL
TREATMENT ZONE

— OVERHEAD DUCT TO BE REMOVED
WITHIN FORMER MOLDING ROOM AREA
ONLY

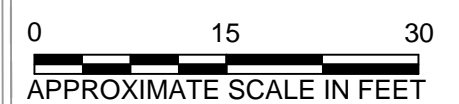
—OU3 SOURCE AREA A

MAINTAIN 8'Wx10'H CORRIDOR FOR ALBEA FORK
LETS AND PALLET TRUCKS (IN-LINE WITH
EXISTING OVERHEAD DOORS ON SOUTH AND
NORTH ENDS OF FORMER MOLDING ROOM

GROUP A

~~INTERIOR OVERHEAD
DUCTING~~

— PDI-SB34



FINAL (100%) DESIGN, IN SITU THERMAL REMEDIATION SYSTEM,
OU3, PVGCS SITE, WARREN COUNTY, NEW JERSEY

SCALE:

SHEET SIZE:

D

REFERENCE NO.:
R18-004.01

SHEET: 1 OF 1

C102

WELLFIED LAYOUT

RAMBOLL
LLP US CORPORATION, CHICAGO, IL 60606 (312)
288-2800

200-3600
WWW.RAMBOLL.COM



STERS GROUP, INC. PO BOX 737 LONGVIEW, WA 98601

ATTACHMENT 1

Photos of Drill Rig Enclosures



Photo 1. View of interior of drill rig enclosure with PVC pipe frame erected within the MPA during installation of supplemental soil borings performed in December 2018.



Photo 2. View of exterior of drill rig enclosure proximal to facility production lines used during installation of supplemental soil boring PDI-SB27 installed in the MPA in December 2018.



Photo 3. View of another drill rig enclosure erected within the MPA during the supplemental soil borings performed in December 2018.

ATTACHMENT 2
Shift Schedule

8 Week Staffing Schedule							
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
TRS	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	Offsite	Offsite	1st & 2nd Shift
Rig 1-GSE	Drill	Drill	Drill	Drill	*Offsite	*Offsite	Drill
Rig 2							
Rig 3-PW							
	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
TRS	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift
Rig 1-GSE	Drill	Drill	Drill	Drill	Drill	Drill	Drill
Rig 2							
Rig 3-PW		offsite inspect	Travel/train	Mob	Drill	Drill	Drill
	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
TRS	1st & 2nd Shift	1st Shift	Offsite	Offsite	11am & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift
Rig 1-GSE	Drill	Travel	Offsite	Offsite	Offsite	Offsite	Offsite
Rig 2							
Rig 3-PW	Relocate to PR	Offsite	Offsite	Offsite	2nd shift drill	1st & 2nd Shift	1st & 2nd Shift
	29-Dec	30-Dec	31-Dec	1-Jan	2-Jan	3-Jan	4-Jan
TRS	1st & 2nd Shift	1st & 2nd Shift	1st Shift	Offsite	Offsite	Offsite	Offsite
Rig 1-GSE	Offsite	Offsite	Offsite	Offsite	Offsite	Offsite	Offsite
Rig 2							
Rig 3-PW	1st & 2nd Shift	1st & 2nd Shift	demob	Offsite	Offsite	Offsite	Offsite
	5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
TRS	Offsite	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift
Rig 1-GSE	Travel	Drill	Drill	Drill	Drill	Drill	Drill
Rig 2							
Rig 3-PW	Offsite	Drill	Drill	Drill	Drill	Drill	Drill
	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan
TRS	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	Offsite	Offsite	Offsite
Rig 1-GSE	Drill	Drill	Drill	Travel	Offsite	Offsite	Offsite
Rig 2							
Rig 3-PW	Drill	Drill	Drill	Drill	Offsite	Offsite	Offsite
	19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
TRS	Offsite	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift
Rig 1-GSE	Offsite	Travel	Drill	Drill	Drill	Drill	Drill
Rig 2							
Rig 3-PW	Offsite	Drill	Drill	Drill	Drill	Drill	Drill
	26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	1-Feb
TRS	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	1st & 2nd Shift	Offsite	Offsite	Offsite
Rig 1-GSE	Drill	Drill	Drill	Drill	Travel	Offsite	Offsite
Rig 2							
Rig 3-PW	Drill	Drill	Drill	Drill	Offsite	Offsite	Offsite

* GSE stays local 12/12-12/13